CHECK LIST FOR THE B.S. DEGREE IN BIOLOGY

B.S. PREPARATION FOR THE SSTC IN BIOLOGY

Degree advisors: LS 135. SSTC Adviser: Dr. Kathy S. Williams

This program prepares for the Single Subject Credential Program in Biology. Completion of these courses and the other SDSU degree requirements will earn a BS in Biology and you will have demonstrated subject matter competency, in lieu of taking the CSET exams.

PREPARATION FOR THE MAJOR (37 units of required lower division courses + 4 for CSET waiver)

<table>
<thead>
<tr>
<th>Biology course</th>
<th>Title</th>
<th>Units</th>
<th>Chemistry course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol 203</td>
<td>Principles of Cell &amp; Molecular Biol.</td>
<td>3</td>
<td>Chem 232</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Biol 203L</td>
<td>Princ. of Cell &amp; Molecular Biol. Lab</td>
<td>1</td>
<td>Chem 232L</td>
<td>Organic Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>Biol 204</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
<td>Math 124</td>
<td>Calculus for the Life Sciences</td>
<td>4</td>
</tr>
<tr>
<td>Biol 204L</td>
<td>Principles of Organismal Biology Lab</td>
<td>1</td>
<td>Phys 180A</td>
<td>Fundamentals of Physics</td>
<td>3</td>
</tr>
<tr>
<td>Biol 215</td>
<td>Biostatistics</td>
<td>3</td>
<td>Phys 182A</td>
<td>Physical Measurements</td>
<td>1</td>
</tr>
<tr>
<td>Chem 200</td>
<td>General Chemistry</td>
<td>5</td>
<td>Phys 180B</td>
<td>Fundamentals of Physics</td>
<td>3</td>
</tr>
<tr>
<td>Chem 201</td>
<td>General Chemistry</td>
<td>5</td>
<td>Phys 182B</td>
<td>Physical Measurements</td>
<td>1</td>
</tr>
</tbody>
</table>

FINISHING YOUR DEGREE IN FOUR YEARS

To finish in four years, all 9 sets of premajor courses listed above will need to be finished by the end of the 4th semester, or the 5th at the latest.

IMPACT

Biology is impacted. After admission to SDSU, students are initially placed into the Biology premajor. Premajors must meet department-specific criteria in order to be admitted to the major. Admission to the Biology major requires:

- completion of all Preparation for the Major courses
- an overall GPA of at least 2.6 (for all courses taken)
- combined GPA of 2.7 or higher in Preparation courses
- a minimum grade of C in each Preparation course
- satisfaction of the lower-division writing competency requirement
- no coursework for the premajor or the major may be graded Cr/NC

After completing these requirements, meet with the Biology advisor to be admitted to the major. Students who do not meet one or more requirements should meet with the Biology advisor each semester to determine an appropriate course of action.

PREREQUISITES

- all prerequisites for all courses are necessary, and many are computer-enforced
- speak to the course instructor if you believe that a prerequisite should be waived for some unusual reason
- you cannot take Chem 200 without 1) passing a placement exam, or 2) passing Chem 100 with a C or better
- you cannot take Biology 366 before being admitted to the major
- meet with a Bioadviser if your prerequisite courses from another institution are not properly recognized in your Degree Audit Report

MAJOR: BIOLOGY W/ PREP. FOR THE SSTC IN BIOLOGY (Minimum of 36 upper division units)

An overall 2.0 GPA is required for courses in the major.

Required courses (26 units):

<table>
<thead>
<tr>
<th>Biology course</th>
<th>Title</th>
<th>Units</th>
<th>Biology course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol 352</td>
<td>Genetics and Evolution</td>
<td>3</td>
<td>Biol 366</td>
<td>Biochem., Cell &amp; Mol. Biol. II</td>
<td>4</td>
</tr>
<tr>
<td>Biol 354L</td>
<td>Ecology and the Environment Lab</td>
<td>2</td>
<td>Biol 436</td>
<td>Human Physiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Chem 365</td>
<td>Biochem., Cell &amp; Mol. Biol. I</td>
<td>3</td>
<td>Biol 452</td>
<td>Sci Concept Develop &amp; Integration(^1)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Biol 590</td>
<td>Physiology of Human Systems(^2)</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective courses (10 units): Eelectives include an organismal course selected from Biol ‡458, ‡460, ‡515, ‡523, ‡524, ‡525, ‡526, ‡530, 531. The remaining 6-7 units can include Biology courses numbered 350-599, and certain Chemistry courses from 410A-599.

Approved organismal course | 3-4 | Other (remaining 6-7 units) | Other (remaining 6-7 units)

ADDITIONAL COURSES FOR SINGLE SUBJECT BIOLOGY TEACHERS

1. We recommend (but do not require) Linguistics 420 for GE Explorations, part B.

2. Additional requirements for SSTC coursework alternative to CSET. Not required for the Biology major.

   Geol 101  Dynamics of the Earth Lab  1
   Geol 104  Earth Science                3
   Phys 499  History of Science & Technology\(^3,4\)  3

3. Prerequisites for the SDSU Teacher Credential postbac program. Not required for Biology major or CSET waiver.

   TE 280  Health Ed for Teachers  1
   ED 451  Intro Multicultural Education\(^4\)  3
   SPED 450  Classroom Ad. for Special Populations\(^4\)  2

\(^1\) Grade of B or better required in Biology 452 for CSET waiver.
\(^2\) You may substitute Biol 336 for Biol 590 and still receive a SSTC CSET waiver. However, Biol 336 will not count as an elective for the Biology major.
\(^3\) N Sci 315 covers these topics, but it is no longer offered. Note that only Physics 499 covering the History of Science and Technology can be used.
\(^4\) These three UD courses do not satisfy major or GE requirements.

\(\dagger\) Not taught in 2015-2016
\(\ddagger\) Required for Biology major.

(Use this as a worksheet. Refer to your catalog for official requirements.)
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Dr. Andrew J. Bohonak, Professor and Vice Chair of Biology,
Director of Undergraduate Advising and Curriculum
Mr. Eddie Lopez, M.S., Associate Director of Advising
Ms. Arlene Castillo, M.S., Administrative Coordinator

For the most current information and answers to 25 Frequently Asked Questions
See the bioadvising web page   http://www.sci.sdsu.edu/bioadvise/

Degree opportunities
The Department of Biology offers the following degrees:

| B.S. in Biology, with optional emphases in Cellular & Molecular Biology, Ecology, Evolution & Systematics, Marine Biology, or Zoology | B.A. in Biology |
| B.S. in Microbiology, with an optional emphasis in Clinical Laboratory Science/Public Health Microbiology | B.A. in Microbiology |
| Minor in Biology, with optional emphases in five areas | Biotechnology Certificate |
| Demonstrate subject matter competency for the Single Subject Teaching Credential in Biology/Life Sciences |

Changing majors or minors
Biology and Microbiology are impacted majors. If you wish to change majors, add a second major, or add a minor, see our department policies at   http://www.sci.sdsu.edu/bioadvise/

Additional information
Prospective students: http://arweb.sdsu.edu/es/admissions/
Chemistry 200 placement exam: http://www.chemistry.sdsu.edu/courses/CHEM200/200_Placement_exam.php
"TAP" database of courses that will automatically transfer: https://sunspot.sdsu.edu/pubred/tap.disp
Articulation of science courses that are not in the TAP database: meet with Biology advisors
Resources for traditionally underrepresented groups: CASA http://www.sci.sdsu.edu/casa/
Career Services (register by your sophomore year): http://career.sdsu.edu/student_affairs/career/
Preprofessional Health Advising Office (GMCS-323): http://www.sci.sdsu.edu/preprof/
Official explanation of graduation requirements: http://arweb.sdsu.edu/es/advising/9gradreqs.html

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